Overview

Models

Model N900

230050-001

230050-421

Model C900

258123-001

258123-421

Model N900s

230051-001

230051-421

Model C900s

258124-001

258124-421

Product Highlights

Compaq, the leader in Network Storage, delivers the *StorageWorks*™ NAS B3000 – the entry-point into NAS/SAN fusion solutions bringing enterprise-level availability, scalability and performance in a turnkey package

- Entry-point to the fusion of NAS and SAN – Universal Network Storage – provides the best utilization of storage investment. Consolidate NAS and SAN into a single, managed storage infrastructure
- Enterprise level scalability – to 27TB
- Highly available solution – including clustering, RAID ADG, fully integrated software packages, no-single-point-of-failure configurations available
- Turnkey package – configurations include all of the components to provide high performance block- and file-serving

Key Benefits

Maximized Return on Storage Investment

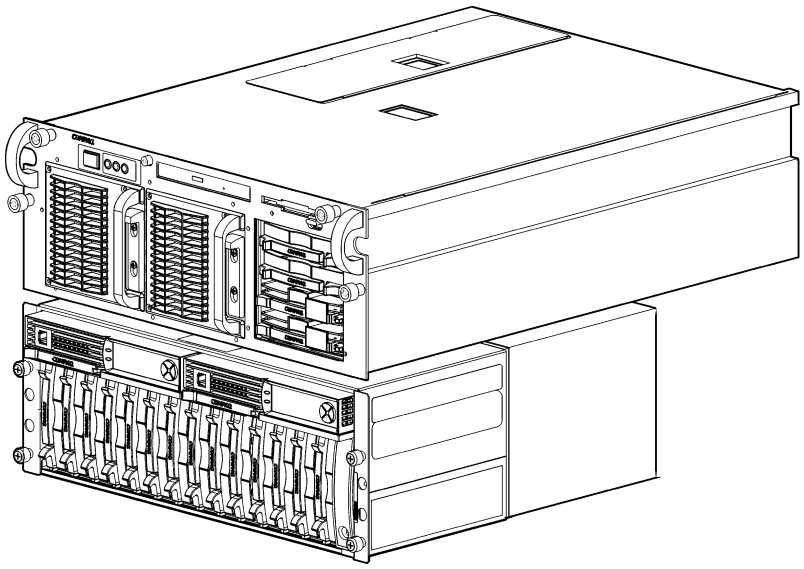
- Minimize ongoing operational expenses associated with file serving
- Enable clients and applications to easily access data over the existing network, while also reducing the cost of accessing SAN based storage
- Save money and resources with centralized storage and system management

Unlimited Scalability

- Grow your storage capacity as your business grows-without downtime and without compromising performance
- Up to 27TB capacity scalability, higher capacity can be reached with external switches
- The B3000 supports both 1Gb/sec and 2Gb/sec Fibre channel fabrics to ensure that your investment in infrastructure is protected.
- DAS to SAN means file data that is currently stored on 1" Universal disk drives using newer Compaq Smart Array controllers, as well as file data on an RA4100 can easily be migrated to the B3000. Simply remove the drives from the older systems and insert them into the B3000. All configuration information and data will be preserved allowing migration to be completed in minutes, not hours or days.

Continuous Data Availability

- Ensure that data is always available enabling business continuance through:
  - Cluster Configurations
  - Advanced Data Guarding
  - Hardware redundancy
  - File replication
  - Backup support
  - Antivirus support



COMPAQ

NAS B3000 Base Configurations

NAS B3000 Model N900 *230050-001 (US)* *230050-421 (Int'l)*	**Processor**	Two (2) 900 MHz Intel Pentium III Xeon Processors standard (up to 4 supported)
	Cache Memory	2MB Level 2 writeback cache per processor
	Memory	2GB (Standard, 4x 512MB ECC SDRAM) to 4GB (Maximum)
	Network Controller	Integrated Compaq NC3134 and NC3135 Fast Ethernet NIC 64 PCI Dual Port 10/100 in a slot (4 total 10/100 ports standard)
	Host Bus Adapter	One (1) FCA2101 Host Adapter
	Storage Controller	Integrated Smart Array Controller (Two channel, one channel for external SCSI backup)
	Hard Drive	Two (2) 36.4GB Ultra3 10K 1″ drives for redundant system software
	Power Supply	Two (2) hot pluggable 450W Power Supplies
	Optical Drive	24x IDE CD-ROM Drive
	External Storage	One (1) MSA1000 with controller and 4 x 72GB Ultra 3 10K 1" drives
	Form Factor	Rack 8U
NAS B3000 Model C900 *258123-001 (US)* *258123-421 (Int'l)* *The clustered offerings of the StorageWorks NAS B3000 include two (2) server heads & one (1) MSA1000 SAN. The specifications shown are representative of what is included in each individual server head.*	**Processor**	Two (2) Intel Pentium III 900 MHz Xeon Processors standard (up to 4 supported)
	Cache Memory	2MB Level 2 writeback cache per processor
	Memory	2GB (Standard, 4x 512MB ECC SDRAM) to 4GB (Maximum)
	Network Controller	Integrated Compaq NC3134 and NC3135 Fast Ethernet NIC 64 PCI Dual Port 10/100 in a slot (4 total 10/100 ports standard)
	Host Bus Adapter	One (1) FCA2101 Host Adapter
	Storage Controller	Integrated Smart Array Controller (Two channel, one channel is SCSI only for backup)
	Hard Drive	Two (2) 36.4GB Ultra3 10K 1″ for redundant system software
	Power Supply	Two (2) Hot pluggable 450W Power Supplies
	Optical Drive	24x IDE CD-ROM Drive
	External Storage	One (1) MSA1000 with two controllers and 6 x 72 GB Ultra 3 10K 1" drives
	Form Factor	Rack 12U

NAS B3000 Base Configurations

NAS B3000 Model N900s *230051-001 (US)* *230051 -421 (Int'l)*	**Processor**	Two (2) Intel Pentium III 900 MHz Xeon Processors standard (up to 4 supported)
	Cache Memory	2MB Level 2 writeback cache per processor
	Memory	2GB (Standard, 4x 512MB ECC SDRAM) to 4GB (Maximum)
	Network Controller	Integrated Compaq NC3134 and NC3135 Fast Ethernet NIC 64 PCI Dual Port 10/100 in a slot (4 total 10/100 ports standard)
	Host Bus Adapter	One (1) FCA2101 Host Adapter
	Storage Controller	Integrated Smart Array Controller (Two channel, one channel is SCSI only for backup)
	Hard Drive	Two (2) 36.4GB Ultra3 10K 1″ for redundant system software
	Power Supply	Two (2) Hot pluggable 450W Power Supplies
	Optical Drive	24x IDE CD-ROM Drive
	External Storage	One (1) MSA1000 with controller and 4 x 72GB Ultra 3 10K 1" drives
	Embedded Switch	One (1) 6 port embedded 2Gb switch
	Form Factor	Rack 8U

NAS B3000 Model C900s *258124-001 (US)* *258124-421 (Int'l)* *The clustered offerings of the StorageWorks NAS B3000 include two (2) server heads & one (1) MSA1000 SAN. The specifications shown are representative of what is included in each individual server head.*	**Processor**	Two (2) Intel Pentium III 900 MHz Xeon Processors standard (up to 4 supported)
	Cache Memory	2MB Level 2 write back cache per processor
	Memory	2GB (Standard, 4x 512MB ECC SDRAM) to 4GB (Maximum)
	Network Controller	Integrated Compaq NC3134 and NC3135 Fast Ethernet NIC 64 PCI Dual Port 10/100 in a slot (4 total 10/100 ports standard)
	Host Bus Adapter	Two (2) FCA2101 Host Adapter
	Storage Controller	Integrated Smart Array Controller (Two channel, one channel is SCSI only for backup)
	Hard Drive	Two (2) 36.4GB Ultra3 10K 1″ for redundant system software
	Internal Storage	Two (2) Hot pluggable 450W Power Supplies
	Power Supply	24x IDE CD-ROM Drive
	Optical Drive	Two (2) Intel Pentium III 900 MHz Xeon Processors standard (up to 4 supported)
	External Storage	One (1) MSA1000 with two controllers and 6 x 72 GB Ultra 3 10K 1" drives
	Embedded Switch	Two (2) 6 port embedded 2Gb switches
	Form Factor	Rack 12U

Standard Features

Processor

Model N900, C900, N900s, C900s

Two (2) Intel Pentium III Xeon 900MHz processors (upgradeable to 4)

Cache Memory

2-MB level 2 write back cache per processor standard

Memory

Standard	2 GB (512 x 4 PC100MHz ECC SDRAM Memory with Advanced ECC functionality)
Maximum	4 GB

NOTE: Advanced ECC Memory Technology protects the data even in the event of an entire SDRAM component failure. Embedded in the chipset design, this feature allows the use of Industry-Standard Registered DIMMs.

Upgradability

Upgradeable to four processors, upgradeable to 4 GB of ECC SDRAM, upgradeable storage capacity

Network Controller

Integrated Compaq NC3134 Fast Ethernet NIC 64 PCI Dual Base 10/100 in a slot and a Compaq NC3135 Fast Ethernet NIC 64 PCI dual 10/100 daughter card (total 10/100 ports is 4) (Gigabit options available)

Host Adapters

FCA2101 Host Bus Adapter

Expansion Slots

I/O (6 Total, 2 Available)		PCI Voltage:
Two (2) 64-bit/66MHz PCI Hot Plug	1 available	3.3 Volt Only
Two (2) 64-bit/33MHz PCI Hot Plug	0 available	5 Volt or 3.3 Volt
One (1) 64-bit/33MHz PCI Non-Hot Plug	0 available	5 Volt or 3.3 Volt
One (1) 32-bit/33MHz PCI Non-Hot Plug	1 available	5 Volt Only

NOTE: One 64-bit/66MHz PCI Hot Plug slot available and one 32-bit/33MHz PCI Non-Hot Plug slot available

Storage Controller

Integrated Smart Array Controller (Two channel) (supports Internal RAID 0, 1, 0+1, 5 and external tape devices)

NOTE: The integrated Smart Array Controller is disabled. The Integrated Smart Array Controller is embedded on the peripheral board. Standard shipping configuration for the system disks is RAID 1.

Internal Storage

Diskette Drives	1.44 MB
CD-ROM	24x IDE CD-ROM Drive (slim line)
Hard Drives	Two 1" 36.4-GB Ultra 3 10K rpm hot plug drives (contain operating system in a RAID 1 configuration)
Maximum Internal Storage	78.2 GB (2 x 36.4-GB Wide Ultra3 1″ drives)

External Storage

Minimum External Storage	MSA1000 (4 (for non-clustered) to 6 (for clustered) x 72GB drives depending on model)

Interfaces

Parallel	Not supported
Serial	1
	NOTE: You can configure a second serial device to your NAS B3000 server by installing the auxiliary serial connector that ships with the server. The auxiliary connector attaches to a serial port B on the peripheral board and exits the rear of the server through the auxiliary serial knockout located directly above the dual power feeds.
Pointing Device (Mouse)	1
Graphics	Available through the "Remote Insight Board" only
Hot Plug Keyboard	1
External Wide Ultra2 SCSI	1

Standard Features

Graphics	Integrated 1280 x 1024, 16M color on PCI local bus, 4MB video memory **NOTE:** The integrated vide card is disabled, video is provided by the Integrated Remote Insight Board	
Form Factor	Rack (8U = 14 inches),4U for the Server component and 4U for the storage enclosure. Ships with sliding rails and cable management arm	
Compaq Software	*SANworks*™ Virtual Replicator	*SANworks* Virtual Replicator combines a rich set of innovative capabilities that enhance and simplify storage management. Customers can pool physical storage and create virtual disks of up to a terabyte each. Virtual disk space can be allocated as needed, allowing customers to respond quickly to changing storage capacity requirements. Through virtualization, online volume growth, snapshot and management features, the software complements the standard capabilities within the operating system. By utilizing industry-standard server, storage, and network-interconnect components, an organization's current and future storage investments are protected.
	SANworks Secure Path	Secure Path software is included in the base system image. *SANworks* Secure Path is a high availability multi-pathing software that provides continuous data access
	Rapid Start	Compaq designed rapid deployment and configuration tool
	Compaq *Insight Manager* XE™	Compaq Insight Manager XE leverages the power of the Internet to provide web-based systems management, and plays a key role in Compaq's strategy to simplify IT management. Compaq Insight Manager XE reduces systems management cost, improves operational efficiency and effectiveness, and minimizes systems downtime.
	Compaq Management Agents	The Compaq Management Agents (http://www.compaq.com/products/servers/management/agents.html) form the foundation for Compaq's Intelligent Manageability strategy. They provide direct, browser-based access to in-depth instrumentation built into Compaq servers, workstations, desktops, and portables, and send alerts to Compaq Insight Manager XE and other management consoles in case of subsystem or environmental failures. For additional information about the Compaq Management Agents and other management product from Compaq, please visit the management website at http://www.compaq.com/manage
	Compaq *SmartStart*™	The server configuration and software integration tool from Compaq. Minimum SmartStart version supported 5.3
	Array Configuration Utility (ACU) with Smart Array Controllers	Same easy to use yet powerful graphical user interface (GUI) configuration utility and easy to navigate wizards for all Smart Array Controllers
	Array Configuration Utility (ACU-XE) with Smart Array Controllers	Compaq Configuration Utility XE (ACU-XE) web-based software for Smart Array products and the *StorageWorks* RAID Array 4x00 systems allows for ease of configuration and expandability for your disk arrays, remote configuration capabilities, and multi-platform support.
Industry Standard Compliance	ACPI 2.0 Compliant PCI 2.2 Compliant PXE Support (Optional when configured with a PXE-enabled slot-based NIC) WOL Support Physical Address Extension (PAE) Support Microsoft Logo certifications	
Intelligent Manageability	Compaq Remote Insight Lights-Out Edition Included Automatic Server Recovery-2 (ASR-2) Compaq Insight Manager Compaq Insight Manager XE Integrated Remote Console (IRC) Integrated Management Log (IML) Off-Line Backup Processor capability Dynamic sector repairing and drive parameter tracking (with Smart Array controllers) Redundant/adaptive load balancing NIC Support	

Standard Features

Availability	Advanced Data Guarding PCI Hot Plug with push button functionality Continuous cooling provided by 8 Hot Plug Redundant System Fans Integrated Smart Array Controller for RAID data protection/performance and maximum data bandwidth Advanced Error Checking and Correcting (ECC) Technology **NOTE**: Advanced ECC Memory Technology protects the data even in the event of an entire SDRAM component failure. Embedded in the chipset design, this feature allows the use of Industry-Standard Registered DIMMs. Hot Plug Ultra2/Ultra3 Drive Bays 2 Redundant Hot Plug Power Supplies Standard Redundant NIC support Pre-Failure Warranty (covers processors, hard drives, and memory)
Serviceability	Internal Diagnostics Display (IDD) numerically indicates specific DIMM or processor failure. LED display on front panel indicates power/interlock, fan, and memory/microprocessor health Spring-loaded memory board release latches prevent unseating incidents PCI Card Guide locks full length PCI cards in place during transit Customer driven interior system fan design (all system fans interior to chassis) Removable, internal center panel eases access to the power supply and hard drive backplane boards Optional High Voltage PDU cable exits chassis at a right angle to simplify cable management at rear of chassis
Security	Power-on password Hot plug keyboard password Diskette drive control Diskette boot control Network Server Mode Security Provision Parallel and serial interface control Administrator's password Disk configuration lock Hot plug access security
Server Power Supply	450-Watt Hot Plug Power Supply **NOTE:** Two 450-Watt Hot Plug Power Supplies ship standard with the system
OS Support	Windows Powered OS (OS and all software needed for storage management is pre-configured from the factory) **NOTE:** For an up-to-date listing of the latest drivers available for the *StorageWorks* NAS B3000, please see: http://www.compaq.com/storage/nas/B3000
Service and Support	Compaq Services provides a wide range of service offerings, including a three-year, limited warranty that is fully supported by a worldwide network of resellers and service providers, toll-free 7 x 24 hardware technical phone support and Pre-Failure Warranty coverage of hard drives, memory and processors. **NOTE:** Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center

B3000 External Storage Components

With the following components, your storage capacity and performance can be scaled to new levels:

Modular SAN Array 1000

The 4U cabinet houses up to fourteen 1" Compaq Universal hot pluggable Ultra2 and/or Ultra3 drives.

The modular design of the MSA1000 makes it possible to add redundant controllers, redundant single port Fibre Channel I/O Modules or Fabric Switches and storage expansion enclosures.

MSA1000 Controller

The MSA1000 Controller is an integrated RAID controller with an integrated LCD/LED status display and 128-MB read/write battery-backed cache (expandable to 256 MB per controller). Redundant MSA1000 controllers are an option.

Key Features

- Redundant controller support
- Fabric, Private Loop & Public Loop Support
- Auto Negotiated F, FL & L Port Login
- RAID 0, 1, 1+0, 5 and ADG
- 2Gb/1Gb Frequency Agile
- Primary & Secondary Inter-Controller Link (ICL)
- Host based configuration via ACU
- Remote configuration and monitoring via ACU XE (offline and remote) & CIM XE

MSA1000 Controller Management Features

- **Selective Storage Presentation**: allows multiple hosts to access a single MSA1000 storage system. Host access can be defined all the way down to a logical volume level.
- **Online RAID Level Migration**: allows for online post-configuration change to RAID level without destroying data or volume information.
- **Online Capacity Expansion**: lets you add storage to an operational MSA1000—reducing expensive server downtime.
- **Online Volume Extension**: allows for the capacity growth of existing logical volumes.
- **Global Online Spare**: reduces the risk of data loss by facilitating automatic rebuilds after a drive failure.

Fault Tolerance

Several fault tolerant configurations, which keep data available and servers running while drives are being replaced, are supported including:

- **Advanced Data Guarding (RAID ADG)**: Allocates the equivalence of 2 parity drives across multiple drives and allows simultaneous write operations.
- **Distributed Data Guarding (RAID 5)**: Allocates parity data across multiple drives and allows simultaneous write operations.
- **Drive Mirroring (RAID 1, (1+0 Striped Mirroring))**: Allocates half of the drive array to data and the other half to mirrored data, providing two copies of every file.

Fault Recovery

Minimizes downtime, reconstructs data, and facilitates a quick recovery from drive failure

- **On-Line Spares**: If a failure occurs, recovery begins with an on-line spare and data is reconstructed automatically. One on-line spare can be assigned per array and used across multiple arrays. It is also possible to assign different on-line spares across different arrays.
- **Array Accelerator**: Onboard, battery-backed cache memory protects data in the event of a power failure. In the unlikely event of a controller failure, the battery-backed cache will save critical user data for up to three days.

MSA1000 Fibre Channel I/O Module

The Fibre Channel I/O module provides a 2Gb/s Fibre Channel connection from the host side into the MSA1000. The MSA1000 Fibre Channel I/O Module includes one 2Gb/s, Short Wave, Small Form Factor Pluggable Transceiver (SFP). A second MSA1000 Fibre Channel I/O Module can be installed for redundancy when a redundant controller is used.

MSA Fabric Switch 6

The MSA1000 Fabric Switch 6 is a six port, 2Gb/s Fibre Channel Fabric Switch. The MSA1000 Fabric Switch 6 replaces the standard single port Fibre Channel connection provided by the MSA1000 Fibre Channel I/O Module. There are a total of five external fibre channel ports. Four of the external fibre channel ports are Small Form Factor Fixed (SFF) short wave transceivers and are not removable. The fifth port requires the installation of a Small Form Factor Pluggable (SFP) transceiver. One port is used internally by the MSA1000 controller.

B3000 External Storage Components

MSA Fabric Switch 6 Key Features

- 2Gb/s 6 Port Fabric Switch integrated into the MSA1000 Chassis
- 5 ports external, 1 port internal
- 4 Small Form Factor Fixed Short Wave (SFF) Transceivers, 1 Small Form Factor Short Wave Pluggable (SFP) Transceiver
- 2Gb/1Gb Frequency Agile
- Managed Out of Band
- Hot Pluggable
- Efficient, space saving design

2Gb/sec Small Form Factor Pluggable (SFP) SW Transceiver Kit

2Gb/sec Small Form Factor Pluggable (SFP) SW Transceivers are industry standard connection devices, which hot plug into 2Gb/sec infrastructure components such as 2Gb/sec Fabric Switches. *StorageWorks* 2Gb/sec SFP SW Transceivers support distances up to 300 meters at 2Gb/sec and 500 meters at 1Gb/sec using multi-mode fiber optic cable.

Multi-Mode Fibre Channel Cables

Multi-Mode Fibre Channel cables provide a thin, flexible cabling solution that is immune to electromagnetic interference. Compaq offers cables to connect the MSA1000 to both 2Gb and 1Gb Fibre Channel infrastructures. LC to LC cables are used when connecting the MSA1000 to other 2Gb Fibre Channel components because both connections will utilize small form factor transceivers. LC to SC cables are used when connecting the MSA1000 to 1Gb Fibre Channel components. 1Gb components use the larger GBIC style transceivers.

NAS B3000 Options

Processor	Pentium III Xeon X900 2MB Processor Option Kit	222627-B21
	NOTE: This processor option kit (PN 222627-B21) supports the *StorageWorks* NAS B3000	
	NOTE: The increasing power of new high-performance processor technology requires increased cooling efficiency for rack-mounted servers. The Compaq Rack 9000 series (120663-xx1 (42U), 120664-xx1 (36U), 120665-xx1 (22U)) provides enhanced airflow for maximum cooling, allowing these racks to be fully loaded with servers using the latest processors. When installing a server with Pentium III Xeon processors running at speeds of 550 MHz or greater in Compaq Rack 7000 series racks (165753-xx1 (42U), and 163747-xx1 (22U)), the new processor technology requires the installation of Compaq's new High Airflow Rack Door Insert (327281-B21 (42U) or 157847-B21 (22U)).	
Memory (DIMMs)	2048MB PC100 Registered ECC SDRAM Memory Kit (4 x 512MB)	189082-B21
	NOTE: Memory must be added in sets of four and be the same size	
Communications	Compaq NC6132 Gigabit Module 1000 SX Upgrade Module for NC3134 and NC3131	338456-B23
	Compaq NC6133 Gigabit Module 1000 LX Upgrade Module for NC3134 and NC3131	338456-B24
	Compaq NC3135Fast Ethernet Module 100 FX Upgrade Module for NC3134 and NC3131	338456-B25
	Compaq NC6136 Gigabit Server Adapter, 64-bit/66MHz, PCI, 1000 SX	203539-B21
	Compaq NC7131 Gigabit Server Adapter, 64 bit/66MHz PCI, 10/100/1000-T	158575-B21
Monitors	Flat Panel TFT7020 Color Monitor Two-Tone (Carbon/Silver)	253216-xxx
	Flat Panel TFT5015 Color Monitor (Opal)	234043-xxx
	Flat Panel TFT5015 Color Monitor Two-Tone (Carbon/Silver)	234044-xxx
	Flat Panel TFT5030 Color Monitor Two-Tone (Carbon/Silver)	228134-xxx
	P720 CRT Monitor Two-Tone (Carbon/Silver)	244373-xxx
	V720 CRT Monitor (Opal)	232943-xxx
	V720 CRT Monitor Two-Tone (Carbon/Silver)	232944-xxx
	V570 CRT Monitor (opal)	228114-xxx
	V570 CRT Monitor Two-Tone (Carbon/Silver)	228113-xxx
	S720 CRT Monitor (Opal) (Lite-On) **NOTE:** Available in North America, Canada, and Greater China only.	239286-xxx
	S720 CRT Monitor Two Tone (Carbon/Silver) (Lite-On) **NOTE:** Available in North America, Canada, and Greater China only.	239287-xxx
	S720 CRT Monitor (Opal) (Samsung) **NOTE:** Available in APD, Latin America, EMEA, and Japan only.	238992-xxx
	S720 CRT Monitor Two Tone (Carbon/Silver) (Samsung) **NOTE**: Available in APD, Latin America, EMEA, and Japan only.	238993-xxx
	S710 Color Monitor	152991-xxx
	TFT5010R Flat Panel Monitor (NA)	217248-001
	TFT5010R Flat Panel Monitor (Int'l)	217248-B31
	TFT5010R Flat Panel Monitor (Japan)	217248-291
	TFT 5600- RKM Keyboard/Monitor/Mouse 1U Kit	221546-001

NAS B3000 Options

Tape Drives

External DAT Tape Drives	
External 20/40GB DAT DDS-4 Tape Drive	157770-001
External 20/40GB DAT DDS-4 Tape Drive (Int'l)	157770-B31
External 20/40GB DAT DDS-4 Tape Drive (Japan)	157770-291

NOTE: Please see the Compaq 20/40GB DAT Tape Drive QuickSpecs for additional options such as host bus adapters, controllers, cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://www5.compaq.com/products/quickspecs/10426_div/10426_div.HTML (Division/World Wide)
http://www5.compaq.com/products/quickspecs/10426_na/10426_na.HTML (North America)

External AIT Tape Drives	
External AIT 35GB,LVD Tape Drive	216885-001
External AIT 35GB,LVD Tape Drive (Int'l)	216885-B31
External AIT 35GB,LVD Tape Drive (Japan)	216885-291

NOTE: Please see the Compaq AIT 35GB, LVD Tape Drive QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://www5.compaq.com/products/quickspecs/10712_div/10712_div.HTML (Division/World Wide)
http://www5.compaq.com/products/quickspecs/10712_na/10712_na.HTML (North America)

External AIT 50GB Tape Drive	157767-001
External AIT 50GB Tape Drive (Int'l)	157767-B31
External AIT 50GB Tape Drive (Japan)	157767-291

NOTE: Please see the Compaq AIT 50GB Tape Drive QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://www5.compaq.com/products/quickspecs/10425_div/10425_div.HTML (Division/World Wide)
http://www5.compaq.com/products/quickspecs/10425_na/10425_na.HTML (North America)

External DLT / SDLT Tape Drives	
External 20/40GB DLT Drive (opal)	340744-B22
External 20/40GB DLT Drive (opal) (Japan)	340744-292

NOTE: Please see the Compaq 20/40GB DLT Drive QuickSpecs for additional options such as data and cleaning cartridges, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://www5.compaq.com/products/quickspecs/10234_div/10234_div.HTML (Division/World Wide)
http://www5.compaq.com/products/quickspecs/10234_na/10234_na.HTML (North America)

External 40/80-GB DLT Enhanced Drive	146197-B22
External 40/80-GB DLT Enhanced Drive (Japan)	146197-292

NOTE: Please see the Compaq 40/80GB DLT Drive QuickSpecs for additional options such as host bus adapters, controllers, cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://www5.compaq.com/products/quickspecs/10658_div/10658_div.HTML (Division/World Wide)
http://www5.compaq.com/products/quickspecs/10658_na/10658_na.HTML (North America)

SDLT 110/220 External, NA	192103-001
SDLT 110/220 External, Int'l	192103-B31
SDLT 110/220 External, Japan	192103-291

NOTE: Please see the Compaq SDLT 110/220GB Tape Drive QuickSpecs for additional options such as adapters, controllers, and media, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://www5.compaq.com/products/quickspecs/10772_div/10772_div.HTML (Division/World Wide)
http://www5.compaq.com/products/quickspecs/10772_na/10772_na.HTML (North America)

NAS B3000 Options

Tape Drives *(continued)*

External DAT Autoloader

20/40-GB DAT 8 Cassette Autoloader External	166505-001
20/40-GB DAT 8 Cassette Autoloader External (Int'l)	166505-B31
20/40-GB DAT 8 Cassette Autoloader External (Japan)	166505-291

NOTE: Please see the Compaq 20/40GB DAT DDS-4 8 Cassette Autoloader QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://www5.compaq.com/products/quickspecs/10518_div/10518_div.HTML (Division/World Wide)
http://www5.compaq.com/products/quickspecs/10518_na/10518_na.HTML (North America)

Tape Storage Enclosures and Arrays

NOTE: Compaq Tape Storage Enclosures and Arrays are compatible with Compaq Internal tape drive options. Please see the QuickSpecs for each Tape Enclosure and Array Model to check for tape drive compatibility. The URL's are provided below.

3U RM Storage Enclosure

3U RM Storage Enclosure, Model 0	230603-B21
3U RM Storage Enclosure, Model 2 AIT	230604-B21
3U RM Storage Enclosure, Model 2 DLT	230605-B21
3U RM Storage Enclosure, Model 2 SDLT	230606-B21

NOTE: Please see the Compaq 3U RM Storage Enclosure QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://www5.compaq.com/products/quickspecs/10854_div/10854_div.HTML (Division/World Wide)
http://www5.compaq.com/products/quickspecs/10854_na/10854_na.HTML (North America)

DLT Tape Array III

DLT Tape Array III Model 0	168047-001
DLT Tape Array III Model 0 (Japan)	168047-291
DLT Tape Array III Model 0 (Int'l)	168047-B31
DLT Tape Array III Model 40/80-4	161140-001
DLT Tape Array III Model 40/80-4 (Int'l)	161140-B31
DLT Tape Array III Model 40/80-4 (Japan)	161140-291
DLT Tape Array III SDLT-4 (NA)	229760-001
DLT Tape Array III SDLT-4 (Int'l)	229760-B31
DLT Tape Array III SDLT-4 (Japan)	229760-292

NOTE: Please see the *StorageWorks* DLT Tape Array III QuickSpecs for additional information including Tape Drives, Cartridges, Controllers, and SCSI Cables and additional options needed for a complete solution at:
http://www5.compaq.com/products/quickspecs/10684_na/10684_na.HTML (North America)
http://www5.compaq.com/products/quickspecs/10684_div/10684_div.HTML (Division/World Wide)

TA1000 AIT Tape Array

TA1000 AIT Tape Array, Model 5, Rackmount (US)	195479-001
TA1000 AIT Tape Array, Model 5, Rackmount (Int'l)	195479-B31
TA1000 AIT Tape Array, Model 5, Rackmount (Japan)	195479-291
TA1000 AIT Tape Array, Model 10, Rackmount (US)	175005-001
TA1000 AIT Tape Array, Model 10, Rackmount (Int'l)	175005-B31
TA1000 AIT Tape Array, Model 10, Rackmount (Japan)	175005-291

NOTE: Please see the Compaq TA1000 AIT Tape Array QuickSpecs for additional information including Tape Drives, Cartridges, Controllers, and SCSI Cables and additional options needed for a complete solution at:
http://www5.compaq.com/products/quickspecs/10591_na/10591_na.HTML (North America)
http://www5.compaq.com/products/quickspecs/10591_div/10591_div.HTML (Division/World Wide)

NAS B3000 Options

Tape Storage Enclosures and Arrays *(continued)*

Tape Storage Enclosure Cable Kits	
LVD Cable Kit, VHDCI/HD68	168048-B21
NOTE: For use with the 3U RM Storage Enclosure and DLT Tape Array III only.	
LVD Cable Kit, HD68/HD68	242381-B21
NOTE: For use with the 3U RM Storage Enclosure and DLT Tape Array III only.	

Tape Automation

SSL2020 Automated AIT Mini-Library	
SSL2020 AIT Mini-Library 1 drive, 20 slot Rackmount	175196-B21
SSL2020 AIT Mini-Library 2 drive, 20 slot Rackmount	175196-B22
SSL2020 AIT Library Pass Thru with Transport	175312-B21
SSL2020 AIT Library Pass Thru Extender	175312-B22
AIT 50GB Drive Add-On LVD Drive for SSL2020 AIT Library	175197-B21
Required Adapters/Controllers for SSL2020 AIT Mini-Library	
64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter	129803-B21
64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter (Japan)	129803-291
SAN Access Module for Smart Array 5302 Controller	216687-B21
SAN Access Module for Smart Array 5302 Controller (Japan)	216687-291
Smart Array 5302/FC Controller	216688-B21
Smart Array 5302/FC Controller (Japan)	216688-291

NOTE: Please see the SSL2020 Automated AIT Tape Library Solution QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:
http://www5.compaq.com/products/quickspecs/10580_na/10580_na.HTML (North America)
http://www5.compaq.com/products/quickspecs/10580_div/10580_div.HTML (Division/World Wide)

TL891DLX Automated DLT Tape Library	
TL891DLX DLT Library, 1 drive Rack, LVD	157305-B21
TL891DLX DLT Library, 2 drive Rack, LVD	157305-B22
Add-On 40/80GB Drive for TL891DLX, LVD	157303-B21
Add-On 40/80GB Drive for TL8x1HVD	157304-B21
Required Adapters/Controllers for TL891DLX Automated DLT Tape Library	
64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter	129803-B21
64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter (Japan)	129803-291
SAN Access Module for Smart Array 5302 Controller	216687-B21
SAN Access Module for Smart Array 5302 Controller (Japan)	216687-291
Smart Array 5302/FC Controller	216688-B21
Smart Array 5302/FC Controller (Japan)	216688-291

NOTE: Please see the *StorageWorks* TL891DLX Automated DLT Tape Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:
http://www5.compaq.com/products/quickspecs/10733_na/10733_na.HTML (North America)
http://www5.compaq.com/products/quickspecs/10733_div/10733_div.HTML (Division/World Wide)

NAS B3000 Options

Tape Automation *(continued)*

MSL5026 Library	
MSL5026DLX Library	
MSL5026DLX, 1 40/80GB DLT, LVD Rackmount	231891-B21
MSL5026DLX, 2 40/80GB DLT, LVD Rackmount	231891-B22
MSL5026SL Library	
MSL5026SL Library, SDLT 110/220, 1 Drive, LVD, Rackmount	231892-B21
MSL5026SL Library, SDLT 110/220, 2 Drives, LVD, Rackmount	231892-B22
MSL5K Field Upgrade SDLT 110/220 Drive, LVD	231823-B22
Required Adapters for MSL5026 Library	
64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter	129803-B21
64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter (Japan)	129803-291

NOTE: Please see the *StorageWorks* MSL5026DLX or MSL5026SL Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:
http://www5.compaq.com/products/quickspecs/10860_na/10860_na.HTML (North America)
http://www5.compaq.com/products/quickspecs/10860_div/10860_div.HTML (Division/World Wide)

TL895 DLT Library	
TL895 (96 slot) library unit, 2 drive	349350-B22
TL895 (96 slot) library unit, 3 drive	349350-B23
TL895 (96 slot) library unit, 4 drive	349350-B24
TL895 (96 slot) library unit, 5 drive	349350-B25
TL895 (96 slot) library unit, 6 drive	349350-B26
TL895 (96 slot) library unit, 7 drive	349350-B27
DLT7000 drive upgrade kit	349351-B21
DLT7000 drive upgrade kit (Japan)	349351-291
Required Adapters for TL895 DLT Library	
StorageWorks Dual Channel Ultra-Wide Differential Library Host Bus Adapter	157299-B21

NOTE: Please see the TL895 Automated DLT Tape Library Solution QuickSpecs for additional information including Upgrade Kits, Accessories, *ProLiant*™ Connectivity Kits, Host Bus Adapters, SCSI Cable Kits, and Localization Kits and additional options needed for a complete solution at:
http://www5.compaq.com/products/quickspecs/10243_na/10243_na.HTML (North America)
http://www5.compaq.com/products/quickspecs/10243_div/10243_div.HTML (Division/World Wide)

Enterprise 9000 System Library	
ESL9198DLX	
ESL9198 Enterprise Library LVD, 0 Drives	194993-B21
ESL9198DLX Enterprise Library 2 40/80 Drive	194993-B22
ESL9198DLX Enterprise Library 4 40/80 Drive	194993-B24
ESL9198DLX Enterprise Library 8 40/80 Drive	194993-B28
ESL9000 Add-On 40/80GB DLT Drive, LVD in Hot Plug Canister (ESL9198DLX only)	221248-B21
Required Adapters for ESL9198DLX	
64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter	129803-B21

NOTE: 64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter is required to support the LVD based libraries (ESL9198DLX).

NOTE: Please see the *StorageWorks* ESL9198DLX Enterprise Library QuickSpecs for additional information including Tape Drives, Cartridges, Controllers, and SCSI Cables and additional options needed for a complete solution at:
http://www5.compaq.com/products/quickspecs/10730_na/10730_na.HTML (North America)
http://www5.compaq.com/products/quickspecs/10730_div/10730_div.HTML (World Wide)

NAS B3000 Options

Tape Automation *(continued)*

Enterprise 9000 System Library *(continued)*

ESL9198SL

ESL9198 Enterprise Library LVD, 0 Drives	194993-B21
ESL9198SL Enterprise Library, LVD 4 110/220 SDLT Drives	234618-B21
ESL9198SL Enterprise Library, LVD 8 110/220 SDLT Drives	234618-B22
ESL9000 Field Upgrade SDLT 110/220, LVD Drive (ESL9198SL, ESL9326SL only)	234617-B21

NOTE: Please see the *StorageWorks* ESL9198SL Enterprise Library QuickSpecs for additional information including Tape Drives, Cartridges, Controllers, and SCSI Cables and additional options needed for a complete solution at:
http://www5.compaq.com/proudcts/quickspecs/10867_na/10867_na.HTML (North America)
http://www5.compaq.com/products/quickspecs/10867_div/10867_div.HTML (World Wide)

ESL9326DX

ESL9326DX, 0 Drive Unit	146205-B21
ESL9326DX Enterprise Library 6 40/80 Drive	161265-B23
ESL9326DX Enterprise Library 8 40/80 Drive	161265-B24
ESL9326DX Enterprise Library 16 40/80 Drive	161265-B28
ESL9000 Add-On 40/80GB DLT Drive, HVD in Hot Plug Canister (ESL9326DX only)	161267-B21
ESL9000 Field Upgrade SDLT 110/220, HVD Drive (ESL9326D/DX only)	234617-B22

NOTE: Please see the *StorageWorks* ESL9326DX Enterprise Library QuickSpecs for additional information including Tape Drives, Cartridges, Controllers, and SCSI Cables and additional options needed for a complete solution at:
http://www5.compaq.com/products/quickspecs/10737_na/10737_na.HTML (North America)
http://www5.compaq.com/products/quickspecs/10737_div/10737_div.HTML (World Wide)

ESL9326SL

ESL9326SL Enterprise Library LVD 0 Drives	234488-B21
ESL9326SL Enterprise Library LVD 6 110/220 DSLT Drives	234615-B21
ESL9326SL Enterprise Library LVD 8 110/220 DSLT Drives	234615-B22
ESL9326SL Enterprise Library LVD 16 110/220 DSLT Drives	234615-B26
ESL9000 Field Upgrade SDLT 110/220, LVD Drive (ESL9198SL, ESL9326SL only)	234617-B21

NOTE: Please see the *StorageWorks* ESL9326SL Enterprise Library QuickSpecs for additional information including Tape Drives, Cartridges, Controllers, and SCSI Cables and additional options needed for a complete solution at:
http://www5.compaq.com/products/quickspecs/10868_na/10868_na.HTML (North America)
http://www5.compaq.com/products/quickspecs/10868_div/10868_div.HTML (World Wide)

***StorageWorks* Options**

Fibre Channel SAN Switch/8 with Fabric Operating Software	158222-B21
Fibre Channel SAN Switch/16 with Fabric Operating Software	158223-B21
StorageWorks SAN Switches Integrated/32	230616-B21
StorageWorks SAN Switches Integrated/64	230617-B21
StorageWorks Fibre Channel SAN Switches 8-EL	176219-B21
StorageWorks Fibre Channel SAN Switches 16-EL	212776-B21

NAS B3000 Options

Uninterruptible Power Systems – Rack	Compaq UPS R1500 XR (100 to 127) (NA)	204404-001
	Compaq UPS R1500 XR (208 to 480) (Int'l)	204404-B31
	Compaq UPS R1500 XR (100 to 127) (Japan)	204404-291
	Compaq UPS R3000 XR (120V) (NA)	192186-001
	Compaq UPS R3000 XR (208V) (NA)	192186-002
	Compaq UPS R3000 XR (100V) (Japan)	192186-291
	Compaq UPS R3000 XR (200V) (Japan)	192186-292
	Compaq UPS R3000 XR (230V) (Int'l - detachable cord)	192186-B31
	Compaq UPS R3000 XR (230V) (16A IEC309 Plug)	192186-B32
	Compaq UPS R3000 XR (230V) (16A CEE 7/7 SCHUKO Plug)	192186-B33
	Compaq UPS R3000 XR (230V) (16A BS-546 Plug)	192186-AR1
	Rackmountable UPS R6000 (208V) (NA)	347207-001
	Rackmountable UPS R6000 (230V) (Int'l)	347207-B31
	Rackmountable UPS R6000 (200V) (Japan)	347207-291
	R6000 Extended Runtime Module **NOTE:** Available for the UPS R6000 Models only.	347224-B21
	Extended Runtime Module, R3000 XR **NOTE:** Available for the UPS R3000 XR Models only.	192188-B21
	Extended Runtime Module, R1500 XR **NOTE:** Available for the UPS R1500 XR Models only.	218971-B21
	Six-Port Card **NOTE:** Available for the new UPS "XR" Models only.	192185-B21
	SNMP/Serial Port Card **NOTE:** Available for the new UPS "XR" Models only.	192189-B21
	SNMP-EN Adapter	347225-B21
	High to Low Voltage Transformer (250VA)	388643-B21
	Multi-Server UPS Card	123508-B21
	Scalable UPS Card	123509-B21

Rackmountable PDUs – 1U / 0U	Compaq Power Distribution Unit-16A (200 to 240V)	207590-B21
	Compaq Power Distribution Unit-24A (200 to 240V) (NA, Japan, LA)	207590-D72
	Compaq Power Distribution Unit-32A (200 to 240V) (Int'l)	207590-B31
	Compaq Power Distribution Unit-40A (200 to 240V)	207590-B23
	Compaq Power Distribution Unit-24A (100 to 127V) (NA, Japan, LA)	207590-D71
	Compaq Dual Input Power Distribution Unit-24A High Voltage (NA only)	191186-001
	Compaq Dual Input Power Distribution Unit-24A High Voltage (Int'l)	191186-B31
	Compaq High Voltage PDU Right Angled Cable Kit (IEC13-IEC14)	142257-004
	NOTE: The 10-Amp AC cord, which ships standard with the Compaq *ProLiant* DL580, utilizes a right angle plug on the server side (the side that plugs into the server) to avoid interference with the Cable Management Arm. Compaq High Voltage PDUs ship standard with 15Amp AC cords that incorporate straight plugs on the server side. The optional Compaq High Voltage PDU Right Angled Cable Kit (142257-004) provides a right angle version of the 15-Amp AC cord. When deploying Compaq High Voltage PDUs with the Compaq *ProLiant* DL580, you may choose to simplify cable management at the rear of the server chassis by installing this option kit.	

CarePaq™ Services

- *CarePaq* is defined as an upgrade to the product warranty attribute, available for a specific duration and hours of coverage.
- *CarePaq* is not available for less than the products warranty duration.
- *CarePaq* is available for sale anytime during the warranty period for most products, but the commencement date will be the same as the Warranty Start Date (delivery date to end user customer). Proof of purchase may be required.
- *CarePaq* services are prepaid.

For additional *CarePaq* (hardware & software and installation support) information on European and other countries, as well as, orderable part numbers please refer to the URL listed below and select the country of your choice: http://www.compaq.com/services/*CarePaq*/index.html

Remedial Services

- Compaq Services will also provide remedial services for ongoing maintenance.

Software Product Services

- Stand-alone telephone support
- Software Product Subscription

Hardware Product Services

- On-site Maintenance (includes warranty support)
- Response time upgrades during the warranty period
- Post-warranty coverage

Warranty Upgrade Options

- Response – Upgrade on-site response from next business day to same day 4-hours
- Coverage – Extend hours of coverage from 9 hours x 5 days to 24 hours x 7 days
- Duration – Select duration of coverage for a period of 1year to multi-years

B3000 *CarePaq* Information

FM-X7INS-IN	INSTALL NAS B3000
FM-X7XHW-36	3YR 9X5/ND NAS B3000
FM-X7XHW-60	5YR 9X5/ND NAS B3000
FM-X74HR-12	1YR 9X5/4H NAS B3000
FM-X74HR-36	3YR 9X5/4H NAS B3000
FM-X74HR-60	5YR 9X5/4H NAS B3000
FM-X7724-12	1YR 24X7/4H NAS B3000
FM-X7724-36	3YR 24X7/4H NAS B3000
FM-X7724-60	5YR 24X7/4H NAS B3000

Fully customized remedial services are also available. Please contact your Customer Services Department for assistance

***CarePaq* Information for EMEA**

*CarePaq*s exist for items of *StorageWorks* Hardware typically attached to *ProLiant* Servers. A supported products list is available at:

http://emea-inline.eur.compaq.com/csd/smb/SupportProd.asp

Additional *CarePaq*'s are being developed to cover a broader range of *StorageWorks* Hardware and Software. Ask your local *CarePaq* Business Manager for the latest details.

***CarePaq* PS Information for EMEA**

CarePaq™ Priority Services brings a totally new approach that removes the complexity from evaluating, planning and purchasing services on Compaq Alpha and Storage platforms. *CarePaq* Priority Services are easy to purchase and easy to use and cover all external storage products not covered under Server based *CarePaq*s.

Standard Offerings:

- *CarePaq* Priority Services provide an integrated hardware and software support that ensure consistent coverage across storage configurations
- *CarePaq* Priority Service offers a rapid four-hour response with guaranteed work-through to completion for three years
- *CarePaq* Priority Services have a standard call window of Monday to Friday 08:00 - 17:00 with uplifts to full 24x7 over three years with four-hour response time and work through to completion
- *CarePaq* Priority Services also provide software support, with a two-hour response time for telephone access to highly trained support personnel.

DRIVE SUPPORT

		Quantity Supported	Position Supported	Controller
Removable Media	1.44MB Diskette Drive	Up to 1	C	Integrated
	IDE CD-ROM Drive	Up to 1	B	Integrated IDE
Tape Drives	Internal AIT 50GB, Hot Plug Internal AIT 35GB, LVD, Hot Plug Internal 20/40GB DAT, Hot Plug	Up to 1	0 & 1 or 2 & 3	Integrated Smart Array Controller Smart Array 5300 Controller 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-Bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
	External AIT 50GB Tape Drive External AIT 35GB, LVD Tape Drive	Up to 2	External	Integrated Smart Array Controller Dual Channel Wide-Ultra SCSI-3 Adapter Wide-Ultra SCSI-3 Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-Bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
	DLT Tape Array III	1 to 4	External	Dual Channel Wide-Ultra SCSI-3 Adapter Wide-Ultra SCSI-3 Adapter
	SDLT 110/220GB, External	Up to 2	External	64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
	External 40/80GB DLT Enhanced External 20/40GB DLT	Up to 3	External	Integrated Smart Array Controller Dual Channel Wide-Ultra SCSI-3 Adapter Wide-Ultra SCSI-3 Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-Bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
	TA1000 AIT Tape Array	Up to 1	External	Compaq Wide-Ultra SCSI-3 Adapter 64-Bit Dual Channel Wide Ultra2 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
	SSL2020 AIT Mini-Library	2 drives per SCSI channel	External	64-Bit Dual Channel Wide Ultra2 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter SAN Access Module for Smart Array 5302 Controller Smart Array 5302/FC Controller
	MSL5026DLX (40/80GB DLT based) and MSL5026SL (SDLT-based) Library	2 drives per SCSI channel	External	64-Bit Dual Channel Wide Ultra2 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
	TL895 (96 slot) DLT Library (2 - 7 Drives)	2 drives per SCSI channel	External	Compaq Wide-Ultra SCSI Adapter 64-Bit Dual Channel Wide Ultra2 SCSI Adapter
	TL891DLX DLT Library	2 drives per SCSI channel	External	64-Bit Dual Channel Wide Ultra2 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter SAN Access Module for Smart Array 5302 Controller Smart Array 5302/FC Controller

Technical Specifications

Server Unit Rack Dimensions

*Each *StorageWorks* NAS B3000 consists of a differing amount of Servers and Storage based on model choice. These dimensions represent one (1) server

***Dimensions** (HxWxD)	6.94 x 19 x 28.3 in/ 17.6 x 48.3 x 71.9 cm	
Chassis Footprint (HxWxD)	6.94 x 19 x 25 in/17.6 x 48.3 x 63.5 cm	
Weight No hard drives installed, one power supply	66 lbs/29.9 kg	
Input Requirements (per power supply)	Rated Input Voltage	90 to 120 VAC/200 to 240 VAC
	Rated Input Frequency	50 to 60 Hz
	Input Power	600W @ 110 VAC/600W @ 220 VAC
	Rated Input Current	7A (90 VAC), 5A (120 VAC), 3A (210 VAC)
BTU Rating	2291 BTU	
SCSI Connector	One 68-pin connector supporting Wide Ultra2 SCSI	
Power Supply Output Power (per power supply)	Rated Steady-State Power	450W/450W (lowline/highline)
		480W/480W (lowline/highline)
Temperature Range	Operating	50° to 95° F/10° to 35° C
	Non-operating	–20° to 140° F/–29° to 60° C
	Shipping	–22° to 122° F/–30° to 50° C
Relative Humidity (non-condensing)	Operating	20% to 80%
	Non-operating	5% to 90%
Maximum Wet Bulb Temperature	101.7° F/38.7° C	
Acoustic Noise	Idle (Fixed Disk Drives Spinning)	

Storage Component Dimensions

*Each *StorageWorks* NAS B3000 consists of a differing amount of Servers and Storage based on model choice. These dimensions represent one (1) MSA1000 Storage Component

Dimensions *(HxWxD)	6.94 x 19.0 x 19.5 in
Weight	66 lbs/29.9 kg

1.44MB Diskette Drive

Diskette Size	3.5 in	
LED Indicators (front panel)	Green	
Read/Write Capacity per Diskette (high/low density	1.44MB/720KB	
Drive Supported	One	
Drive Height	One-third	
Drive Rotation	300 rpm	
Transfer Rate (high/low)	500/250 Kb/s	
Bytes/Sector	512	
Sectors/Track (high/low)	18/9	
Tracks/Side (high/low)	80/80	
Access Times	Track-to-Track (high/low)	3/6 ms
	Average (high/low)	94/169 ms
	Settling Time	15 ms
	Latency Average	100 ms
Cylinders (high/low)	80/80	
Read/Write Heads	Two	

Technical Specifications

Hot Plug Wide Ultra3 SCSI Hard Drives	**36.4 GB 10K** 176496-B22	Capacity	36419.2 MB	
		Height	1 in/25.4 mm	
		Width	4.0 in/101.6 mm	
		Interface	Wide Ultra3 SCSI	
		Transfer Rate Synchronous (Maximum)	160 MB/s	
		Seek Time (typical reads, including settling)	Single Track	0.9 ms
			Average	5.7 ms
			Full-Stroke	13 ms
			Rotational Speed	10,000 rpm
		Physical Configuration	Logical Blocks	71,132,000
		Operating Temperature	50° to 95° F/10° to 35° C	
24X Max (or higher) IDE CD-ROM Drive Slim Line	**Disk**	Applicable Disk	CD-ROM (Mode 1 and 2)	
			CD-DA, CD-XA (Mode 2, Form 1 and 2)	
			Photo CD (Single and Multi-session)	
			Mixed Mode (Audio and Data combined)	
		Capacity	540 MB (Mode 1, 12 cm)	
			650 MB (Mode 2, 12 cm)	
		Diameter	4.7 in, 3.15 in/12 cm, 8 cm	
		Rotational Speed	4200 rpm maximum	
		Center Hole	0.6 in/15 mm diameter	
		Thickness	1.2 mm	
		Track Pitch	1.6 µm	
	Block Size	Mode 1	2,048	
		Mode 2	2,340, 2,336, 1,024 bytes	
		CD-DA	2,352 bytes	
		CD-XA	2,328 bytes	
	Interface	IDE (ATAPI)		
	Access Times (typical)	Random	100 ms	
		Full-Stroke	2000 ms	
	Audio Output Level	Line-Out	0.7 VRMS at 47 kOhms	
		Headphone	0.6 VRMS at 32 kOhms (maximum volume)	
	Data Transfer Rate	Sustained	150 KB/s (single)	
		Burst	2100 to 3600 KB/s	
	Cache Buffer	128 KB		
	Start-up Time (typical)	< 7 seconds		
	Stop Time	< 4 seconds		
	Laser Parameters	Type	Semiconductor Laser GaA1As	
		Wave Length	780 ± 25 nm	
		Divergence Angle	53.5° ± 1.5°	
		Output Power	0.14 mW	
	Operating Conditions	Temperature	41° to 113°F/5° to 45°C	
		Humidity	10% to 80%	
	Dimensions	(HxWxD, maximum)	1.69 x 5.75 x 8.19 in/4.29 x 15 x 20.8 cm	
		Weight	2.66 lbs/1.2 kg	

Integrated Smart Array Controller	**Data Compatible with all Smart Array Controllers**	Yes
	Instant Upgrades to other Smart Array Controllers	Yes
	Consistent Software Manageability Tools	Yes
	PCI Bus	32-bit, 33 MHz (integrated on peripheral board)
	PCI Peak Data Transfer Rate	133 MB/s
	SCSI Protocols Supported	Ultra2, Wide-Ultra
	SCSI Peak Data Transfer Rate	80 MB/s
	NOTE: For *ProLiant* servers having TWO internal drive bays on separate SCSI ports: SCSI Peak Data Transfer Rate is 160 MB/s total; 80 MB/s per channel and Channels is 2.	
	Channels	2
	NOTE: For *ProLiant* servers having two internal drive bays on separate SCSI ports: SCSI Peak Data Transfer Rate is 160 MB/s total; 80 MB/s per channel and Channels is 2. The second channel on the DL580 is for external tape support only.	
	SCSI Ports (external/internal)	1/1
	NOTE: For *ProLiant* servers having two internal drive bays on separate SCSI ports: SCSI Peak Data Transfer Rate is 160 MB/s total; 80 MB/s per channel and Channels is 2. The DL580 has a SCSI port at the back of the server for external tape support only.	
	Drives Supported (maximum)	Maximum = total number of drives
	NOTE: Maximum is the total number of internal drives on each specific *ProLiant* server.	
	Cache	8-MB read only
	RAID Support	0, 1, 1+0, 5
	Logical Drives (maximum)	32
	Online Configuration	Yes
	Online Capacity Expansion	Yes
	Logical Drive Capacity Extension	Yes
	Online Stripe Size Migration	Yes
	Online RAID Level Migration	Yes
	Online Spare Support	Yes
	Automatic Data Recovery	Yes
	Drive Roaming	Yes
	Redundant Controllers	No

Technical Specifications

Compaq NC3134 Fast Ethernet NIC 64 PCI Dual Base 10/100	**Network Interface**	10Base-T/100Base-TX	
	Compatibility	PCI v2.2, IEEE 802.3/802.3u compliant	
	Data Transfer Method	64-bit/66-MHz bus-master PCI	
	Network Transfer Rate	10Base-T (Half-Duplex), 10Base-2	10 Mb/s
		10Base-T (Full-Duplex)	20 Mb/s
		100Base-TX (Half-Duplex)	100 Mb/s
		100Base-TX (Full-Duplex)	200 Mb/s
	Connector	Dual RJ-45	
	I/O Address and Interrupt	Automatic Configuration	
	Cable Support	10Base-T / 100Base-TX	Categories 3, 4 or 5 UTP (2 or 4 pair); up to 328 feet (100 meters) Category 5 UTP (2 pair); up to 328 feet (100 meters)

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